Available online at www.sciencedirect.com

ScienceDirect

Procedia - Social and Behavioral Sciences 205 (2015) 693 – 701

Procedia
Social and Behavioral Sciences

6th World conference on Psychology Counseling and Guidance, 14 - 16 May 2015

Influence of Socio-Economic Status and Classroom Climate on Mathematics Anxiety of Primary School Pupils

Dorothy Ebere Adimora[a]*, Edith Nwakaego Nwokenna[b],Joachim Chinweike Omeje[c],Uchenna Nichodemus Eze[d]

[a] *Dr.Dept. of Educational Foundations/CUDIMAC, Educational Psychology, Faculty of Education, University of Nigeria, Nsukka. Post code- 410001- Nigeria*

[b] *Dr.Dept. of Arts Education, Faculty of Education, University of Nigeria, Nsukka Post code- 410001- Nigeria*

[c] *Asso. Prof.Dept. of Educational Foundations, Guidance and Counseling, Faculty of Education, University of Nigeria, Nsukka. Post code- 410001- Nigeria*

[d] *Prof. Dept. of Educational Foundations, Educational Psychology, Faculty of Education, University of Nigeria, Nsukka. Post code- 410001- Nigeria*

Abstract

The study investigated the influence of socio-economic status and classroom climate on mathematics anxiety of pupils in Nsukka Local Government Primary Education Authority of Enugu State, Nigeria. Three research questions and three null hypotheses guided the study. Expost-facto research design was used, the study made use of 103 public primary schools with a population of 12628 primary five pupils in Nsukka Local Government Primary Education Authority of Enugu State, Nigeria. The sample was 432 primary five pupils. The instrument used for the study was a questionnaire with three clusters, SES, CCS and MAS. The Cronbach Alpha Reliability yielded 0.82, 0.79 and 0.89 respectively. Research questions were analyzed using mean and standard deviation while the hypotheses were tested using analysis of variance (ANOVA) Statistics, post-hoc test and t-test analysis at 0.05 probability level. It was found that socio-economic status and classroom climate significantly influence mathematics anxiety of the pupils. It was recommended among others, that caregivers, parents, teachers and school administrators should create enabling physical, emotional, intellectual and social classroom climate to ensure successful teaching and learning and enhanced interest of students in all subjects especially in mathematics.

Peer-review under responsibility of Academic World Research and Education Center.

Keywords: Classroom Environment, Parental Income, Educational Background, Socio-economic Status and Anxiety.

*Dorothy Ebere Adimora. Tel.: +43-44-34-3.
*E-mail address:*ebere.adimora@unn.edu.ng.

doi:10.1016/j.sbspro.2015.09.109

1. Introduction

It is an undisputable fact that mathematics is an important subject. This could be affirmed by the fact that mathematics and English are two core subjects in primary and secondary schools. In Nigerian primary and secondary schools, students are not promoted to the next class at the end of the session if they fail to pass mathematics, rather they are made to repeat the class and pass the mathematics before moving to the next class. Furthermore, in Nigerian universities, students are not offered admission without at least a credit in mathematics. No wonder, Akinsola and Tella (2007) stated that mathematics is an important school subject because it is associated with more academic or career opportunities and also one of the compulsory subjects and a mandatory requirement for admission in higher institutions. Agwah and Usman (2003) relate importance of mathematics to the scientific, industrial, technological and social progress of any society. Olubusayo (2010) argues that mathematics, by its nature, involves both cognition and affective effects. The glory ofmathematics lies in the fact that mathematics requires hardwork and perseverance. It is in the struggle to understandand through perserverance that one gets equipped in the knowledge of mathematics. As the case may be, some students who are not resilient in this struggle consequently develop hatred for mathematics as a subject.

The researchers are interested in mathematics because it offers what is perhaps the clearest and most concentrated example of intelligent learning, which is to say the formation of conceptual structures communicated and manipulated by means of symbols (Skemp, 1971). Besides, for young children or pupils who are in their most important developmental stage of life, what they learn now andwhat happens to them now would influence them for the rest of theirlives because the early years of their lives are the most determinant of their psychosocial and cognitive development (UNICEF, 2005).This period can be regarded as a period of a remarkable brain development which lays anamazing platform for subsequent learning since any stage not properly explored would reappear as a problem in future (Erikson, 1968). Regrettably, in the recent time, some students perform abysmally poorly in mathematics because, most of them have an erroneous belief that mathematics is difficult. This inability to learn mathematics or persistent failure in this subject has led to the phenomenon of mathematics anxiety or phobia among most students in Nigerian schools.

Anxiety is a general term for several disorders that cause nervousness, fear, apprehension and worry. These disorders affect feeling, behaviour and manifest real physical symptoms. It could also be explained as a feeling of worry, nervousness, or unease, typically about an imminent event or something with an uncertain outcome. It is also a desire to do something typically accompanied by unease (Crosta, 2009). Math anxiety is a real issue that can impact young persons' goals or affect many of their career-related decisions in life, and their overall future. A changing, economically competitive world with the expanding use of computer technology necessitates the need for the understanding of mathematics(Furner and Gonzalez-DeHass, 2011).

Blazer (2011) defined maths anxiety as negative emotions that interfere with the solving of mathematical problems. It ismore than just disliking mathematics and leads to a global avoidance pattern - whenever possible, students avoidtaking math classes and avoid situations in which math will be necessary. It is also refered to as the panic, helplessness, paralysis and mental disorganization that arises among some people whenthey are required to solve a mathematics problem. Richardson and Suinn(1972) explained maths anxiety as feelings of tension and anxiety which interfere with the manipulation of numbers and the solving of mathematical problems in a wide variety of ordinary and academic situations. Some other researchers defined mathematics anxiety (MA) as an irrational dread of mathematics that interferes with manipulation of numbers and solving mathematical problems within a variety of everyday life and academic situations (Furner & Berman, 2003). MA is a serious obstacle for many children across all grade levels. MA, a state of discomfort associated with performing mathematical tasks is thought to affect a notable proportion of the school age children.

Mathematics anxious students seem to learnless mathematics than their low-anxious peers because they take fewer math classes and get poorer grades inthe math classes they take.Researchers now believe that implementation of strategies to prevent or reduce mathanxiety will improve math achievement for many students (Blazer, 2011).Physical symptoms of math anxiety include increased heart rate, clammy hands, upset stomach, andlight headedness. Psychological symptoms include an inability to concentrate and feelings of helplessness,worry, and disgrace. Behavioural symptoms include avoidance of math classes, putting off math homeworkuntil the last minute, and not studying regularly (Mission College, 2009; Plaisance, 2009; Jackson, 2008;Woodard, 2004). Mathematics anxiety can be seen as a result of a breakdown in three different areas of a student's sensory input; the environmental, intellectual, and personality factors. The environmental factors could include negative experiences in

the classroom climate or home factor. The classroom climate is of increasing interest to educational psychologists because classroom experiences tremendously influence the child intellectually, socially, emotionally and physically.

Classroom climate is "the classroom environment, the social,emotional, intellectual and the physical aspect of the classroom," (Bierman, 2011, p.2). It is the idea that teachers influence student growth and behaviour. The student's behaviour affects peer interaction, and the responsibility of influencing these behaviours is placed with the teacher. The way the instructor organizes the classroom leads to a positive environment rather than a destructive and/or an environment that is not conducive for learning. While there are many factors that can influence how a student performs in school, the climate that the teacher creates in the classroom for the students through goal-setting, appropriate challenges, and empathy for the students may be some major factors contributing to student achievement (Bierman, 2011). Students experience the classroom as not just an intellectual space, but also as a social, emotional, and physical environment. Instructors' attentiveness to the intellectual, social, emotional, and physical environments creates a classroom climate conducive to students' engagement with the content and skills of the discipline.

Intellectualenvironment permits the instructors to provide content in an organized and engaged manner and give students motivating and challenging practice that enable them to do authentic tasks. Intellectual factors might include a student's learning style or confidence level, perception of mathematics (Hardfield and McNeil, 1994). Mathematics anxiety (MA) can originate from instructional situations. Fiore (1999)believes that teachers and the teaching of mathematics are known to be the roots of MA. Since the learning of mathematics is a result of the teaching of mathematics,mathematics anxiety may be a result of some faulty strategies applied by the teacher in teaching mathematics (Plaisance, 2009).

Emotionalaspect of classroom climate centers on the ability of the instructor to create an encouraging atmosphere where students feel safe taking risks, receive support when events intrude on learning, and believe they can succeed if they put forth effort. Instructorsfoster approachable and supportive **social**interactions with students and among students so that learning is a collaborative and not competitive endeavour. With respect to the **physical**environment, instructors reduce and remove disruptions and barriers to learning so that all students can equally access course material (Ambrose, Bridges, DiPietro, Lovett and Norman, 2010).Classrooms that subtly or indirectly exclude certain groups of students tend to be common from the students' perspectives; students have a particularly negative reaction to instructors who fail to acknowledge recognize or reinforce them. (Huston and DiPietro, 2007). Greenwood (1984) wrote that the primary origin of MAwas the teaching methods used in teaching basic math concepts. These teaching methods includeassigning the same homework problems for all students, following the textbook exactly, allowingonly one method for solving a problem, and assigning mathematics as punishment (Plaisance, 2009). Mathematics anxiety origins include teacher-related behaviours such as intimidatingcomments, or use of derogatory words on the students, inability to explain concepts, lack of enthusiasm for subject matter, and lack ofpatience with students (Plaisance, 2007).

Teachers'creation of beneficial learning environments that students perceive as useful, most likely influences students' future and career choices positively. It has been shown that some learning environments are so effective that they actually encourage students to pursue careers in mathematics, even if the student encountered that particular environment years before making decisions about career choice. Furner and Duffy (2007) explained that parents with no opportunity to experience an education that would promote a positive feeling about mathematics could pass along mathematics anxiety to the next generation by modeling behaviours of their own discomfort with the subject to the children. Furner and Berman (2003) described some of the environmental causes to include parent's disposition of fearing mathematics, lower socio-economic status, poor instruction or poor instructional technique and a mathematics anxious teacher such as assigning the same work for every one, covering the book through only the examples, giving written work every day, sticking to only one way of solving a problem and assigning mathematics problems as punishment, exhibiting gender bias, demonstrating an uncaring attitude, having unrealistic expectations or embarrassing students in the presence of their peers.

Socioeconomic status (SES), however, is most commonly determined by combining a child's parents' educational level (Jeynes, 2002). SES is a combined total measure of a person's economic and social relative to others, based on income, education and occupation (Marmot and Micheal, 2004). Furthermore, when analyzing a family's SES, the household income earners, education and occupation are examined as well as combined income with an individual when their own attributes are assessed. Family income, occupational prestige, and educationalattainment are measures of socio-economic status (SES)that have been found to influence an individual's lifeopportunities.

Lareau and Annette (2003) observed that SES is typically broken down into three categories; high, middle and low. To describe the three areas, a family or an individual may fall into one of these categories; income, education and occupation can be assessed. Additionally, low income and little education have shown to be strong predictors of a range of physical and mental health problems due to the fact that environmental conditions may be the entire cause of a person's social predicament. Studies have repeatedly revealed that SES affects students' outcomes. Students who have a low SES seem to have lower test scores and are more likely to drop out of school (Eamon, 2005; Hochschild, 2003). It is believed that low SES leads to disruptions in parenting, an increased amount of family conflicts and an increased likelihood of depressions. SES is related to mathematics anxiety and overall poor academic performance. It does not mean that the rich are born smart. This only means that in richer families, children are more likely to have more experiences that stimulate their intellectual development (Teodor, 2012).

Simiyu (2001) opined that the family income refers to wages, salaries, profit, rents and any flow of earnings received. Income can also come in the form of unemployment or workers compensation, social security, pensions, interests or dividends, royalties, trusts, alimony, or other governmental, public, or family financial assistance. Income can be looked at in two terms- relative and absolute. In absolute income, the relationship is that as income increases, so will consumption, but not at the same rate. Relative income dictates a person's or family's savings and consumption based on the family's income in relation to others. Income is a commonly used measure of socio-economic status because it is relatively easy to figure for most individuals. Gender is another crucial issue that is yet inconclusive and controversial. Adimora (2012) defined gender as a range of characteristics distinguishing between male and female, particularly in the cases of men and women and the masculine and faminine attributes assigned to them. Some research indicates that mathematics anxiety (MA) negatively affects mathematics performance and that girls may report higher levels of MA than boys. On the other hand some research indicated that boys' mathematics performance is more negatively affected by MA than girls**(**Devine, Fawcett**,** Szűcs,andDowker, 2012**).**

From a wider picture, the term "gender"refers to a socio-cultural classification of women andmen. One does not know the gender difference with regards to socio-economic status and classroom climate on pupils' MA. Some studies reveal that younger female scholars have been thought to develop anxiety towards mathematics and sciences when they become more interested in social relations in their teen years. It has also been observed that women experience more anxiety in mathematics as a group than men. There is a stereotype that women score less than men when they take math exam (Ashcraft, 2002). Campbell, Reese, O'Sullivan, &Dossey (1996) pointed out that boys and girls have similar mathematics and science proficiency scores on tests at the age of nine. It was further asserted that there was no measurable difference in the math proficiency of 13-year-old boys and girls.

Gender differences in MA have been extensively studied. The results are inconsistent, with a number of studies reporting that females have higher levels of MA than males, Alexander &Martray(1989) and others not confirming significant differences. Devine, Fawcett, Szűcs & Dowker (2012) revealed no gender differences emerged for mathematics performance but levels of MA were higher for girls than for boys. Girls and boys showed a positive and negative correlation between MA.

However, it is not yet clear if pupils' MA could be attributed to their poor socio-economic status or unconducive classroom climate. To the best of the researchers' knowledge, socio-economic status and classroom climate have research evidence in western countries, but such assertion has not been empirically investigated in Nigeria especially on mathematics anxiety using primary school pupils. On that note, the influence of socio-economic status and classroom climate on pupils' mathematics axiety is still unknown and calls for urgent research attention. Against this background, therefore, the researchers, embarked on investigating the influence of socio-economic status and classroom climate on pupils' mathematics anxiety in Nsukka Local Government Education Authority of Enugu State, Nigeria. Pupils in this area seem to have a devastating mathematics anxiety, uncondusive classroom climate and low socio-economic status. The problem which arose for this study, stated in question form, therefore is; what is the influence of socio-economic status and classroom climate on pupils' mathematics anxiety?

The understated research questions guided the study:

1) What is the influence of socio-economic status on pupils' mathematics anxiety?
2) What is the influence of classroom climate on pupils' mathematics anxiety?
3) What is the influence of gender on pupils' mathematics anxiety?

The null hypotheses formulated to guide the study were:

Ho_1: Socio-economic status has no significant influence on mathematics anxiety of pupils.
Ho_2: There is no significant influence of classroom climate on mathematics anxiety of pupils.

Ho_3: Gender does not significantly influence pupils' mathematics anxiety.

2. Method

The design adopted for this study was an ex-post facto research design. The study was conducted in Nsukka Local Government Education Authority of Enugu State, Nigeria, comprising Nsukka Central, Nsukka West and Nsukka East. A population of 103 public primary schools with 12840 primary five pupils in Nsukka Local Government Education Authority, Enugu State, Nigeria were used for the study. Stratified sampling and simple random sampling techniques were used to draw 10 schools from the 103 public primary schools, one primary five class was finally drawn from each of the ten schools. This gave rise to 432 pupils which were used for the study. A questionnaire with three clusters was the instrument used for the study; socio-economic status, classroom climate and mathematics anxiety scales. The statements on three dimensions of socio-economic status - parental occupation, parents' educational qualification and income level were rated on three levels - high, moderate and low, classroom climate and Mathematics anxiety scales were rated on a 4-point scale ranging from Always 4-points; Frequently 3 - points; Sometimes 2-points; Never 1-point. Negatively skewed items were reversed during the analysis. The instrument was validated by three experts who are Professors in the Faculty of Education, University of Nigeria, Nsukka. Cronbach alpha reliability was used to determine the internal consistency of the instruments which yielded 0.86 and 0.92 respectively. Research questions were analyzed using mean and standard deviation while the hypotheses were tested using analysis of variance (ANOVA) statistics, post-hoc test, t-test and Scheffe test analysis at 0.05 probability level. For each respondent, an overall mean score for all the items was computed. An overall mean score of 2.50 and above showed that the socio-economic status, classroom climate and gender significantly influence pupils' mathematics anxiety whereas below 2.50 showed no significant influence of socio-economic status, classroom climate and gender on pupils' mathematics anxiety.

3. Results

Results of the study were presented in line with the research questions and corresponding hypotheses as follows.

Table 1: Mean and Standard Deviation Scores of Socio-Economic Status on Pupils' Mathematics Anxiety.

Levels of Socio-Economic Status	N	Mean	Standard Deviation
Low	122	3.78	.18
Moderate	147	2.90	.34
High	163	1.71	.47
Total	432	2.70	.92

Table one shows three levels of socio-economic status (SES). They are low, moderate and high. Students with low SES had a mean score of 3.78, which indicates high MA, those with moderate SES had 2.90, indicating moderate MA while those with high SES scored 1.71 indicating low MA. Their standard deviations are .18, .34, and .92 respectively.

This shows that 3.78 mean score of pupils with low SES was higher than those with moderate SES of 2.90, the pupils with high SES scored lower, below 2.50 benchmark for acceptance. The null hypothesis which predicted nosignificant influence of socio-economic status on pupils' mathematics anxiety was further subjected to a one way analysis of variance.

Table 2: One Way Analysis of Variance (ANOVA) of the Influence of Socio-Economic Status on Mathematics Anxiety of Pupils.

	Sum of squares	df	Mean Square	f	Sig.	Decision
Between Groups	307.362	2	153.681	1161.68	.000	Rejected
Within Groups	56.767	429	.132			
Total	364.129	431				

Independent variable: Socio-economic Status

Data analyzed on Table 2 show that socio-economic status had significant influence on the dependent variable, mathematics anxiety ($F = 1161.68$, $P<0.05$). The calculated F value is significant at 0.00 which is less than 0.05

level of significance at which the null hypothesis was tested. The null hypothesis is therefore rejected as socio-economic status is a significant factor in pupils' mathematics anxiety. To determine the direction of the significant difference, posthoc multiple comparison analysis was conducted using scheffe test and results presented as shown in table 3 below.

Table 3: Post Hoc Test for the Significant Influence of Socio-Economic Status on Mathematics Anxiety of Pupils.

(I)Socio-Economic Status	(J) Socio-Economic Status	Mean Difference	Std. Error	Sig.
Low	Moderate	0.88*	.04455	.000
	High	2.07*	.04355	.000
Moderate	Low	-0.88*	.04455	.000
	High	1.18*	.04138	.000
High	Low	-2.07*	.04355	.000
	Moderate	-1.18*	.04138	.000

*Significant at 0.05 level

The post HOC test analysis in Table 3 above shows that the mean difference between high and moderate is 0.88, high and low is 2.07, moderate and low is -0.88, moderate and high is 1.18, high and low is -2.07 and high and moderate is -1.18. These differences in mean are all significant at 0.05 level of significance since their probability values for all are 0.00. These suggest that there were significant influence in the mean difference of high and moderate in favour of high and moderate, and low in favour of moderate.

Table 4: Mean and Standard Deviation Scores of Classroom Climate Status on Pupils' Mathematics Anxiety.

Classroom Climate	Mean	N	Std. Dev.	Std. Error Mean
Unconducive	3.40	237	.47	.03049
Conducive	1.85	195	.52	.03757
Total	2.70	432	.92	

The analysis of data presented on Table 4 shows that pupils with unconducive classroom climate had a mean MA score of 3.40 while those with conducive classroom climate had a mean MA score of 1.85. Their total mean score was 2.70. Their standard deviations are .47 and .52 respectively. The mean score of 3.40 for the pupils in unconducive classroom climate which is above 2.50 benchmark for acceptance indicates that they had a high MA, while 1.85 mathematics mean score for those in condusive classroom climate which is below 2.50 benchmark for acceptance indicates that pupils in an unconducive school climate had a low MA. The result of this data was further subjected to a t-test analysis on table 5.

Table 5: T-test analysis of the influence of school climate on pupils' maths anxiety.

Classroom Climate	t	df	Mean Square	sum of squares	r	R-square	Adjusted R Square	sig (2-tailed)
Mathematics Anxiety	32.14	393.375	258.740	364.129	$.843_a$	.711	.710	.000[a]

The analysis of data on Table 5 shows the t-value as 32.14 at 393 degree of freedom and 258.740 as the mean square. This shows a negative influence of classroom climate on MA. The adjusted R- square which is the magnitude of the relationship between classroom climate and MA of .71 means that the classroom climate contributes 71% to pupils' MA. The calculated t-value of (t = 32.14) for the influence of school climate on pupils' MA is .000 which is less than 0.05 level of significance at which the hypothesis was tested. The null hypothesis was

then accepted. Thus classroom climate has no significant influence on pupils' maths anxiety. This implies that classroom climate has no significant influence on pupils' maths anxiety.

Table 6: Mean and standard deviation of the influence of gender on pupils' mathematics anxiety.

Gender of Respondents	N	Mean	Standard Dev.
Male	214	2.72	.89
Female	218	2.68	.95

Data on Table 6 indicate that the male pupils MA pupils' mean score was 2.72 with a standard deviation of .89, while female pupils had MA mean score of 2.68 and a standard deviation of .95. this result indicates a very slight difference in MA of pupils. This result therefore, implies that there is a very slight gender difference in MA of pupils with males having a higher MA.

Table 7.Gender has no significant influence on pupils' mathematics anxiety.
Analysis of Variance (ANOVA) of the Influence of gender on Mathematics Anxiety of Pupils.

Sum of Squares	df	Mean Square	F	Sig.	Decision
364.129	431	.846	.284	0.59	Rejected

The result of the analysis presented on Table 7 shows the probability value for the calculated F as (.284 P > .59) for the influence of gender on mathematics anxiety. Since the probability value of .59 is greater than 0.05 level of significance at which the null hypothesis was tested, the null hypothesis was accepted. Thus there is no significant influence of gender on mathematics anxiety.

4. Discussion

The study investigated the influence of socio-economic status and classroom climate on mathematics anxiety of pupils. The researchers are bothered about pupils as they are still at the Piaget's pre-operational and concrete operational stages of intellectual development - 6-12 years when they need to acquire the right knowledge and skills that will sustain them in later life. The first research question explored the influence of socio-economic status on mathematics anxiety of pupils. The result indicates a significant influence of socio-economic status on pupils' mathematics anxiety. In support of this finding, Eamon, (2005) and Hochschild (2003) assert that low income and little education have shown to be strong predictors of a range of physical and mental health problems due to the fact that environmental conditions may be the entire cause of a that person's social predicament and that SES affects students' outcomes. Students with low SES seem to have lower test scores and are more likely to experience subject anxiety and drop out of school. SES is related to mathematics anxiety and overall academic performance.

Furthermore, the study investigated the influence of classroom climate on pupils' maths anxiety. It was found in this study that classroom climate is a major factor in mathematics anxiety. This was supported by Bierman (2011) in his assertion that the classroom climate created by the teacher in the classroom for the students through goal-setting, appropriate challenges, and empathy for the students may bring some major factors contributing to student achievement as students experience the classroom as not just an intellectual space, but also as a social, emotional, and physical environment which affect their academic achievement and subject anxiety. Fiore (1999) affirmed this view by explaining that iinstructors' attentiveness to the intellectual, social, emotional, and physical environments creates a classroom climate condusive to student engagement with the content and skills of the discipline. Fiore believes that teachers and the teaching of mathematics are known to be the roots of mathematicsanxiety. Plaisance(2009) stated that the learning of mathematics is a result of the teaching of mathematics; MA may be a result of some faulty strategies applied in teaching mathematics.

This study also determined the influence of gender on students' mathematics anxiety. It was found that there was a very slight difference in male and female mathematics anxiety. Ashcraft (2002) found that there is a stereotype that women score less than men when they take math exam. Campbell, Reese, O'Sullivan, &Dossey (1996) pointed

out that boys and girls have similar mathematics and science proficiency scores on tests at the age of 9. It was further asserted that there was no measurable difference in the math proficiency of 13-year-old boys and girls. However, gender issue concerning mathematics anxiety is still inconclusive because there seems to be a controversy and variation in peoples' findings. Studies, however, reveal that mathematics is not related to gender among this group of adolescent students, but rather it is likely to be something related to individual or personal experiences.

5. Recommendation

The psychologists and counselors should endeavour to inculcate confidence, competence, good and organization to reduce pupils' mathematics anxiety. Caregivers, parents, teachers, school administrators should create enabling environment and a conducive physical, emotional, intellectual and social classroom climate that could ensure a successful teaching and enhanced interest of students in all subjects especially mathematics.

Teachers must re-examine traditional teaching method which often does not match students' learning styles and skills needed in society, and lessons presented in a variety of ways so that pupils will perceive mathematics as fun, they will enjoy it so that the joy of mathematics could remain with them throughout the rest of their lives which will ensure the development of asustainable educational system.

Parents should put concerted effort towards ensuring that educational qualification, occupational status and income level do not have an adverse effect on children's career and life opportunities.

6. Conclusion

Theacademic classroom climate is of increasing interest to educational psychologists and teachers in general. Family income level, educational qualification, occupational status, classroom climate such as emotional, and the physical, intellectual, and social aspect of the classroomcan have tremendous influence on how pupils performs in school. Also the climate that the teacher creates in the classroom for the students through goal-setting, appropriate challenges, and empathy for the pupils may be contributory some major factors to adolescent students' adjustment. Moreso, in the recent times, the needs of society require a greater focus formathematics. This necessitates that mathematics be looked upon in a positive light to reduce mathematics anxiety among students especially at the primary school which is the foundation stage.

References

Adimora, D.E. (2012) *Effect of comprehension monitoring strategy on interest and achievement* of Nigeria, Nsukka.

Agwah & Usman (2003) *Training of undergraduate teachers in Nigeria universities: focus on problems ofeffective integration and attitude of students to computers in mathematics instruction.*Retrieved from http.//www.math.uocgr/jetm2/proceeding/gapw9.pdf.

Akinsola, M. A. &Tella, A. (2007) Correlates of academic procrastination and mathematics achievement ofuniversity undergraduate students. *Eurasia Journal of Mathematics, Science and Technology Education*, *3*(4),363-370.

Alexander, L., &Martray, C. (1989) The development of an abbreviated version of the mathematics anxiety rating scale. *Measurement and Evaluation in Counseling and Development, 22*, 143–150.

Ambrose, S.A, Bridges, M.W,DiPietro, M, Lovett, M.C and M.K. Norman. (2010) *How Learning Works: Seven Research-Based Principles for Smart Teaching*. San Francisco, CA: Jossey-Bass.

Ashcraft, M.N. (2002) maths anxiety: personal, educationan and cognitive consequences. *Directions in psychological science, 11*, 181-185.

Blazer, C (2011) Strategies for reducing math anxiety. *Information capsuleresearch services. Vol 1102,*

Bierman, K. L. (2011) "The promise and potential of studying the "invisible hand" of teacher influence on peer relations and student outcomes: A commentary".*Journal of Applied Developmental Psychology*. SI Teachers and Classroom Social Dynamics *32* (5): 297.

Campbell, J. R., Reese, C. M., O'Sullivan, C. Y., &Dossey, J. A. (1996) *NAEP 1994 trends in academic progress: Achievement of U.S. students in science, 1969 to 1994, mathematics, 1973 to 1994, reading 1971 to 1994, and writing, 1984 to 1994*. Washington, DC:

Crosta, P (2009) *All about anxiety what causes anxiety?* Retrievd from http//www.medicalnewstoday.com/info/anxiety/what.

Devine, A; Fawcett, K; Szűcs, D & Dowker, A (2012) Gender differences in mathematics anxiety and the relation to mathematics performance while controlling for test anxiety. *Behavioural and brain functions, 8*: 33.

Dowker, A; Bennet, K Smith, C (2012) Child Development Research Volume 2012 (2012), Article ID 124939, 8 pages. Retrieved from http://dx.doi.org/10.1155/2012/124939.

Devine, A**,** Fawcett, K**,** Szűcs, D andDowker, A (2012)Gender differences in mathematics anxiety and the relation to mathematics performance while controlling for test anxiety. Retrieved from http://www.behavioralandbrainfunctions.com/content/8/1/33.

Eamon, M. K. (2005). Social demographic, school, neighborhood and parenting influences on academic achievement of Latino young adolescents. *Journal of Youth and Adolescence, 34*(2), 163-175.

Erikson, E.(1968) *Identity: Youth and crisis*Norton, New York (1968).

Fiore, G. (1999). Math abused students: are we prepared to teach them? *The MathematicsTeacher, 92*(5), 403-406.

Greenwood, J. (1984) Sound off: my anxieties about math anxiety. *The MathematicsTeacher, 77,* 662-63.
Furner, J.M., & Berman, B.T. (2003) Math Anxiety: Overcoming a Major Obstacle to the Improvementof Student Math Performance. *Childhood Education, 79*(3), 170-175.
Furner, J.M and Gonzalez-DeHass, A (2011) How do Students' Mastery andPerformance Goals Relate to MathAnxiety?*Eurasia Journal of Mathematics, Science & Technology Education,7*(4), 227-242. Retrieved from http://www.ejmste.com/v7n4/eurasia_v7n4_furner.pdf
Hadfield, O.D., & McNeil, K. (1994)The relationship between Myers-Briggspersonality type and mathematics anxiety among preservice elementary teachers.*Journal of Instructional Psychology, 21*(4),375-384.
Huston, T. A., &DiPietro, M. (2007) In the Eye of the Storm: Students Perceptions of Helpful Faculty Actions Following a Collective Tragedy. In D. R. Robertson & L. B. Nilson (Eds.) *To Improve the Academy: Vol25.,* 207-224. Bolton, MA: Anker.
Jackson, E. (2008) Mathematics Anxiety in Student Teachers. *Practitioner Research in HigherEducation, 2*(1), 36-42.
Lareau, Annette. (2003). Unequal Childhoods: Race, Class, and Family Life. University of California Press, Government Printer.
Maloney E. A. and Beilock, S (2012) "Math anxiety: who has it, why it develops, and how to guard against it," Trends in Cognitive Sciences, *16* (8) 404–406.
Marmot, Michael. (2004) The Status Syndrome: How Social Standing Affects Our Health and Longevity. New York: Owl Books.
Mugenda, M and Mugenda, O. (1999) Research Methods: Quantitative and Qualitative Approaches, Acts, Nairobi.
Mission College(2009) *Overcoming Math Anxiety.*Santa Clara, CA. Retrieved from http://salsa. missioncollege.org/mss/stories/storyReader$9.
Olubusayo, A. A. (2010) Academic procrastination in mathematics: causes, dangers and implications of counselling for effective learning. *International education studies 3,* 3: 1-4. Retrieved from http:www.cesenet.org/ies.
Plaisance, D.V. (2009) A Teacher's Quick Guide to Understanding Mathematics Anxiety.*LouisianaAssociation of Teachers of Mathematics Journal, 6*(1).Retrieved from http://www.lamath.org/journal/vol6no1/anxiety_guide.pdf.
Plaisance, D. (2007) Identification of factors that reduce mathematics anxiety of pre-serviceelementary teachers in mathematics content courses. (Retrieved from ERIC database ERIC Document Reproduction ServiceNo. ED505550).
Richardson, F.C., &Suinn, R.M. (1972, November). The mathematics anxiety rating scale: Psychometric data. Journal of Counseling Psychology, 19 (6), 551-554.
Skemp, R. (1979). The psychology of mathematics. Baltimore, MD: Penguin Books
Strawderman, V. W. (2013) Math Anxiety Model. Retrieved from http://www.academicprocrastinationandanxiety/math_anxiety_model.html.
Santrock, J. W. (2005) Children.8th ed. McGraw-Hill, New York, p.332.
Thiruvananthapuram, K; Muthee J.M (2009) Socio - economic status inventory Department of Psychology, University of Kerala.
Tobias, S. (1978) *Overcoming math anxiety.* Boston, Massachusetts: Houghton MifflinCompany.
Teodor. M, (2012)The influence of socio-economic status on schoolperformance. Romanian *Journal of experiemntal and applied research 3*, 2-2012.
UNICEF (2005) Early Childhood Development Kit.Guideline for Caregivers. Retrieved from http://www.crin.org/docs/early%20childhood%20development%20kit.pdf.
Woodard, T. (2004) The Effects of Math Anxiety on Post-Secondary Development Students asRelated to Achievement, Gender, and Age.*Inquiry, 9*(1).ERIC Document Reproduction ServiceNo. EJ876845.
Zhao, N., Valcke, M., Desoete, A., Verhaeghe, J. (2011)The quadratic relationshipbetween socioeconomic status and learning performance in China by multilevel analysis:Implications for policies to foster education equity.*International Journal of EducationalDevelopment*, 20, 11.